Cancer of the Head and Neck



Head and neck cancers account for 3-5% of all cancers in the United States. Men and people over the age of 50 are at most risk for this disease. Use of alcohol and tobacco is a major cause of these types of cancer. The head and neck area includes the lip, tongue, cheeks, pharynx, larynx, salivary glands, sinuses or other part of the oral cavity or throat. Surgery is generally the first treatment course, and is sometimes followed by chemotherapy and/or radiation therapy.

Maintaining Optimal Nutrition

One of the biggest nutritional concerns for people with head and neck cancers is to maintain their weight. Someone experiencing weight loss of 10% within six months may be malnourished. Those who hold their weight steady throughout the treatment process tend to have better outcomes.

Maintaining adequate calorie intake can be a challenge for many reasons. Head and neck cancers can affect any part of the mouth, oral cavity or throat that is essential for chewing and swallowing.

Consider the following:

- First, the tumor itself can obstruct the passageway for food or beverages.
- Second, surgery to remove a tumor and affected tissue can create physical problems in chewing and swallowing.
- Third, chemotherapy and radiation therapy to the area can cause sensitivity, mouth sores, changes in taste, dry mouth, nausea, and vomiting.
- Fourth, the treatment process can cause dental problems, which again make it difficult to chew and swallow.

The following table provides an overview of some of these difficulties, along with general suggestions for coping with them. Remember that everyone's situation is unique. It is best to work with a registered dietitian and other healthcare team members to find the appropriate strategies for your particular situation. A speech therapist can evaluate your ability to chew and swallow, recommend an appropriate consistency of food for you and provide tips on chewing and swallowing safety. For help with other side effects, such as nausea, vomiting, or diarrhea, see our "Fact Sheet on Cancer."

Troubleshooting

Condition	Guideline
Difficulty swallowing with	Eat pureed foods.
potential for aspiration	 Avoid thin fluids, such as water. Use a thickening agent, such as Thick-It, to get the right consistency. Avoid sticky, bulky or crumbly foods, such as peanut butter, bread, crackers. Consider using a tube feeding if you are not able to take in enough calories by mouth.
Dental extractions	Modify food texture to soft or pureed as needed.
Dysphagia, post-op swelling, painful swallowing	 Try moist or pureed foods if there is significant pain and swelling. Avoid highly spiced (e.g., curry), acidic (tomato, citrus), and abrasive foods (toast, crackers). Use liquid supplements (such as Ensure) or make smoothies in a blender.
Dry mouth, taste changes	 Drink liquids throughout the day. Eat moist, soft foods and avoid hard, dry foods such as toast or crackers. Add gravies or other liquids to food. Follow good oral hygiene practices. Use non-drying oral hygiene products, such as non-alcohol mouth washes, sprays, toothpaste. One brand is Biotene.
Significant weight loss	Consider a tube feeding to supplement your food intake by mouth.
Mucositis (painful sores, ulcers or inflammation of the mouth) (see also below)	 Avoid highly spiced (e.g., curry), acidic (tomato, citrus), and abrasive foods (toast, crackers). Drink liquids throughout the day. Eat moist, soft foods. Use non-drying oral hygiene products, such as non-alcohol mouth washes, sprays, toothpaste. One brand is Biotene.

A Special Note on Mucositis

People receiving radiation to the head and neck commonly get mouth sores or inflammation, a condition called mucositis. This makes it painful to eat, with particular sensitivity to crisp foods, such as crackers, or acidic foods, such as orange juice. Treatment options include (1) medications to restore tissue, (2) medication to increase saliva, (3) mouthwashes of baking soda and salt, and (4) good oral care, including brushing teeth two to three times a day.

In some studies, it was also shown that an amino acid called *glutamine* decreased the

number of ulcers and their severity. Amino acids are the building blocks of protein. Glutamine supplements come in powder form and can be mixed with water or other liquid, as well as soft foods such as applesauce or yogurt. The dosage is 10 grams three times per day. To get the most benefit, swish the solution around in your mouth before swallowing to coat the inside of the mouth. Glutamine can also be taken through a tube feeding after mixing with water. Two popular brands are Glutasolve and Jarrow Formulas.

While glutamine may be helpful, it is not safe for everyone. Glutamine is not recommended for people with liver or kidney disease, or people with a history of mental illness, seizures or allergy to MSG (monosodium glutamate). Finally, anyone taking a medication called lactulose should not use glutamine.

Before using a supplement, it is best to check with your registered dietitian or your physician.



Diet Suggestions for Soft, Moist Foods

Note that this is a short list. Work with a registered dietitian for more options.

Protein: Fish, well-cooked, ground or pureed meat; well-cooked beans, peas, eggs, yogurt, tofu

Vegetables: Well-cooked vegetables; avoid acidic foods such as tomato or pickles if mouth is sensitive

Fruit: Canned fruit, bananas; avoid acidic fruits such as citrus or strawberries if mouth is sensitive

Starch: Mashed potatoes (either white or sweet), pasta, noodles, cream of wheat/rice cereal, moistened bread

Liquids: To moisten food, use gravies, broth, water, milk, fruit juices, yogurt, mayonnaise, butter, oil

Other: Desserts such as ice cream, jello, pudding